ABSTRACT

The present invention is directed toward reducing corrosion in a methanol-to-olefin (MTO) effluent processing system, and particularly in the condensate removal system thereof, by injecting a neutralization agent into one or more target regions of the MTO effluent processing system. The neutralization agent ensures that any localized condensation in the MTO effluent processing system, particularly in the condensate removal system, occurs under basic conditions and that any acidic condensable components are neutralized. The invention is also directed to monitoring corrosion in an MTO effluent processing system and to monitoring the pH of localized corrosion sites in order to ensure proper neutralization of any acidic condensation formed therein.